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EC-CAP: Changes and Problems

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"King Pine"—A Critical Case
Pyrethrum: Answer to
Pesty Predicaments

U.S.
Department
of Agriculture
Economic
Research
Service



THE AGRICULTURAL OUTLOOK

Livestock lead farm cash receipt gains. Higher farm prices for livestock and slightly larger crop and livestock marketings are bringing farmers substantial gains in cash receipts this year. The annual rate of realized net farm income in January-June was 7 percent above a year earlier—a similar gain is expected for the year.

Turkey tally. Total turkey production probably will match last year's but storage holdings are down. Prices this fall and winter may therefore be above those a year ago.

Wheat program lops off acreage allotments. The new wheat program, which cuts back acreage allotments from 51.6 million acres in 1969 to 45.5 million acres in 1970, is designed to reverse the 3-year uptrend in carryover levels. The national average price-support loan level stays at \$1.25 per bushel, unchanged from recent years.

Diversion program target: An 80- to 90-billion bushel cutback in wheat production. This is the amount of wheat the 1970 diversion program (paying a maximum of 50 percent of county loan rates) aims to take out of production. The program will allow producers to tailor their plantings by diverting up to one-half of their acreage allotments while maintaining incomes through diversion payments. Wheat marketing certificates in 1970 will be paid on 48 percent of projected production on allotted acres of participants. Farmers may also substitute wheat for feed grains and vice versa in any combination, and still qualify under the 1970 wheat program. This extra effort to cut wheat output comes after an estimated 272 million-bushel July 1 increase in wheat stocks over a year earlier—the largest increase in 4 years.

Reaction to prices. U.S. retail food buyers reacted to rising prices in second quarter 1969

by stretching their food purchases. Total spending for food rose only fractionally from the previous quarter even though after-tax income went up 2 percent. Compared with a year earlier, food spending in the second quarter was up 4 percent—down from the 6-percent rate for all of 1968.

Meat consumption down. Consumers apparently switched to the relatively lower priced foods. They lowered meat consumption in April-June to 2 percent below a year earlier in response to 8-percent higher retail prices. A second-half upturn in food spending appears to be in the works, however. But it will probably be small if buying resistance spreads.

Processors, retailers face squeeze. Consumer reaction this year to higher prices has forced processors and retailers—at least temporarily—to absorb increases in labor and marketing costs. Thus, boosts in retail prices were less than gains at the farm level.

Market basket cost up. Retail cost of USDA's market basket of farm foods rose to an annual rate of \$1,161 in the second quarter of 1969—up 2 percent from the previous quarter and 4.2 percent from a year earlier. Higher meat prices led the upswing. An average of \$477 of the market basket money went to the farmer, up 9.3 percent from a year earlier. Costs of marketing these foods averaged \$684, about 1.0 percent more than a year earlier. The result: Farmers received an average of 41 cents on every dollar consumers spent for market basket foods —2 cents more than they received in the second quarter last year.

Per capita consumption levels. After 3 consecutive years in which we've increased our per person consumption of food 1 percent or more annually, 1969 per capita food consumption is slated to level off. A slight decline is expected in consumption of all livestock products, balanced by a small gain for crop foods.

COTTON

Competition from soybeans, peanuts, and specialty crops continues in most cotton areas. But uncertain yields, prices of such crops, put cotton first in farmer's heart.

When and where cotton continues to prove profitable to a farmer, he'll probably continue to favor it.

Many other factors, of course, help the farmer decide what to plant—his land facilities, equipment, willingness to plant highrisk crops, and crop allotments.

But when it comes right down to it, he is likely to plant the crop that will bring in the most money.

The Economic Research Service recently compared cotton costs and returns with those of major competing crops in various cotton centers of the United States.

Here are some of the broad conclusions drawn from the comparison (not allowing for deviations due to price supports, diversion payments, or other government program subsidy):

Cotton is still by far the most profitable crop in the Mississippi Brown Loam and the Delta areas. Soybeans are generally second.

The net return per acre of cotton (at 24 cents per pound of lint) averaged \$17 more than soybeans on clay soils in the Delta and over \$80 more than soybeans on the best soils in the Brown Loam area. This means that the cotton price could go down by 2.8 cents in the Delta and by 11.2 cents in the Brown Loam area before it would be smart for the farmer to consider growing soybeans.

In Northeast Arkansas, rice is more profitable than cotton by about \$90 an acre, although cotton brings in about \$20 more per acre than soybeans.

Since both cotton and rice are restricted by allotments in the area, and because the soil for each is slightly different, there isn't much competition between the two.

Grain sorghum and wheat are cotton's toughest competitors in the Texas and Oklahoma Plains areas.

In the Texas Black Prairie there is little difference in returns from cotton and grain sorghum—without considering government support payments, which are available on both crops. Farmers generally tend to plant both to protect their allotments and to take full advantage of government programs.

In the Texas and Oklahoma Plains, cotton is more profitable than wheat and grain sorghum. But in the High Plains—with irrigation—cotton and sorghum bring in about the same amount.

In the southeast areas of the United States, cotton's competi-

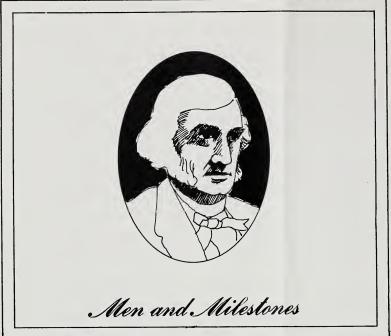
tive edge is not so great, particularly on small farms on the Coastal Plains. There, soybeans are actually more profitable.

In the Georgia-Alabama Coastal Plains peanuts are the big moneymakers. They bring in almost \$100 more per acre than cotton. The price of cotton would have to increase to at least 40 cents a pound to compare favorably with peanuts.

But cotton wins out over soybeans in the Alabama Limestone Valley and Tennessee Brown Loam areas. The difference in per acre profit ranged from \$25 to \$85.

Competition from other specialty crops will continue to increase in most cotton producing areas. However, the high variability of yields and prices of most of these crops will keep them from becoming major crops. Also, most of the increase in production of these crops will probably be at the expense of soybeans and other crops, not cotton. (1)





FATHER OF THE LAND-GRANT COLLEGES

On December 14, 1857, Justin Smith Morrill stands in the U.S. House of Representatives and introduces the first bill in support of land-grant colleges. He is tall, dignified, with typical "Down East" deliberateness of speech. His bill passes the House, is approved by the Senate, only to be vetoed by President Buchanan in 1859. Later Morrill's bill is approved by both houses, and President Lincoln signs it into law on July 2, 1862.

Soon after coming to Washington as a fledgling member of the Vermont delegation to the House of Representatives, Justin Morrill attended a meeting of the U.S. Agricultural Society. There he was exposed to a Federal-land-grant-to-colleges plan which captured his imagination.

On February 28, 1856, he

tried to pass a resolution authorizing the Agriculture Committee to study the establishment of agricultural schools. The resolution did not carry the House.

When Morrill's land-grant bill finally became law in 1862, each State was granted 30,000 acres of public land for each Senator and Representative. Proceeds from the land were to support agricultural and engineering schools.

But Morrill did not stop there. After he became a Senator, he pushed through another bill in 1890, with the help of the Land-Grant College Association. This bill—signed by President Harrison—appropriated up to \$25,000 per State over a 10-year period for landgrant college purposes.

Morrill's lifelong leadership in this cause won him many honors. Several land-grant colleges named halls or buildings after him. And Dartmouth, the University of Pennsylvania, and University of Vermont all gave him honorary degrees. (6)

More Farmers' Money Trapped By Obsolescence Than by Land

Decisions of the past and obsclete equipment often trap farmers' money.

Unlike land which is fairly easily adapted from one enterprise to another, the money the farmer has tied up in specialized buildings and equipment may be lost to him forever.

In 1967, American farmers had invested \$215.5 billion in farm assets, an increase of 255 percent over 1950. Of the total investment, according to ERS estimates, \$16.9 billion was invested in service buildings and machinery.

And somewhere in that \$16.9 billion are the "trapped" resources of agriculture that can be recovered only with great difficulty.

These include buildings and constructions such as silos and grain storage facilities and concrete slab pavements which are directly attached to the land, and specialized equipment for a single crop or livestock enterprise.

Among the situations that cause trapped resources are:

—Single owner farms. When one man runs a farm, he usually tailors the operation to his own tastes and management ability. But when such farms change hands, the transfer of resources isn't always smooth if the new operators don't share the same tastes and talents.

—New advances in farm equipment. The more specialized the equipment, the more limited the resale market for used items Fixed buildings and equipment also have no or, at most, a scanty market apart from the real estate to which they are attached.

—Specialized farming. A feedlot farm sold to an operator who wants to raise grain can make several hundred thousand dollars worth of specialized feedlot buildings and equipment un-

productive and relatively worthless.

What can the farmer do to avoid trapping his resources?

He can determine not only what the investment he is contemplating will earn over a specified period of time but how much is left to recover at any given point in time.

Example: If a farmer knows before he buys and installs automatic auger feeder bunks that in 5 years he will still have to recover 46 percent of his investment, he may well decide not to make the purchases. (4)

A Farming Solution to Pollution? Yes, If Conflicts Are Resolved

The pristine purity of our good earth ended the day life began.

Pollution is not a new problem. Man and animals and plants have always produced wastes.

But until recently, nature was able to cope with the problem. What water wasn't able to wash away, the soil swallowed up.

Technological developments and man's desire for higher levels of living are contributing to a general alteration of his basic environment.

Today nature can no longer dispose of the millions of tons of waste that are produced daily by the millions of people who are collected in our cities. Nor can it manage the wastes of cattle, hogs, dairy cows, and poultry that are today increasingly raised in large, compact production units.

Livestock wastes, once desirable as fertilizer, are now produced in far greater quantity than ever before.

But transporting this fertilizer elsewhere often costs too much

FARM INCOME STATISTICS:

Some of the most quoted-and misquoted—of all statistics are the U.S. Department of Agriculture's national farm income figures. USDA publishes regularly a comprehensive set of income estimates relating to agriculture. The major series, along with other important series from which they are derived, have been developed over more than a third of a century. Each series, whether major or minor, is designed for a specific purpose. For accurate results it should be used only in the way it was designed to be used. Unselective use is a common cause of error. Many figures may be vaguely reported as farm income — cash receipts, realized gross income, total net income, for example. Yet there are billions of dollars worth of difference between them. USDA's estimates center around two major concepts of farm income: One views agriculture as a business or an industry and measures income from the job of farming. The other views the people who live on farms and measures their income from both farm and nonfarm sources. The major series in each classification and their relationship to other series are shown here (5)

COME	FROM	FARMING, 1968	Billion Dollar

CASH RECEIPTS FROM FARM MARKETING Money received from sales of about 150 farm products. GOVERNMENT PAYMENTS TO FARMERS Payments to farmers under farm programs. Net price support loans are included with cash receipts above. NONMONEY INCOME includes home consumption of farm products and imputed rental value of farm dwellings. 3.2 REALIZED GROSS INCOME FROM FARMING Income from farming available for all purposes-farm operation, family living and investment. PRODUCTION EXPENSES All cash spent to operate the farm business, plus certain non-cash items. Includes depreciation of equipment and other capital items rather than current purchases of these items. REALIZED NET INCOME USDA's standard net income figure. The word "realized" indicates that the figure has not been adjusted for changes in inventories. Represents return to operator for his labor and managment, the labor of his family and his invested capital. NET CHANGE IN INVENTORIES Difference this year from last in quantities of each crop and livestock product held on farms, valued at average prices received by farmers during the year just ended. TOTAL NET INCOME This figure is a component of national income figures of the Department of Commerce. It is published in the national income reports of that Department as "net income of farm proprietors."

PERSONAL INCOME OF FARM POPULATION, 1968

PERSONAL INCOME FROM FARM SOURCES: TOTAL NET INCOME FROM FARMING OF FARM RESIDENT OPERATORS This is the total net income of farm operators from farming minus the net income received by farm operators who do not live on farms. FARM WAGES OF LABORERS LIVING ON FARMS Wages and other labor income for farmwork paid by farm operators out of their gross income to workers living on farms. These wages are a production expense to farm operators, but a source of income to the farm population. CONTRIBUTIONS OF FARM RESIDENT OPERATORS AND WORKERS TO SOCIAL 0.3 INSURANCE TOTAL PERSONAL INCOME OF FARM POPULATION FROM FARM SOURCES 13.1 PERSONAL INCOME FROM NONFARM SOURCES: Includes wages, salaries, and other labor income of farm residents from nonfarm jobs, rents and 11.8 royalties, dividends, and interest, net income from nonfarm business and professions, and transfer payments, such as unemployment compensation and social security. TOTAL PERSONAL INCOME OF FARM POPULATION FROM ALL SOURCES

even when regulations do not restrict it.

Similar situations can be found in all sections of the economy. In our desire to raise more livestock, grow more crops, mine more minerals, and manufacture more products, quality of the environment is frequently overlooked.

But as supplies of food and fiber products satisfy our basic demands, a quality environment becomes more and more important.

The problem then becomes how to merge this objective with the one of providing our basic production needs.

Three schools of thought on the subject include:

The prophets of doom who think this is impossible;

The "don't care" group who are apathetic unless they are directly threatened by pollution; and

The moderates who feel pollution abatement and production objectives are not necessarily incompatible.

Those in the last category point out that it is possible to weigh a quality environment on the same scale as other economic goals.

One approach is to express those environmental goals in physical terms and treat them as constraints in determining how to meet the goals at the lowest possible cost.

For example, suppose it is decided to limit the amount of pollution in a stream to a level which will enable fish and wildlife to flourish.

These limits become the constraints and vary with the kind of fish or wildlife desired.

Both farm and industrial producers then must determine which alternative waste disposal system they will use and how they can minimize the cost.

Such analysis spotlights the options that offer the greatest benefits, identifies what must be sacrificed, and suggests ways to resolve conflicting goals. (7)

October's Calendar Is Filled Up With Many Co-Op Month Events

October is Co-op Month 1969, and coming up are many activities to mark the occasion.

In Washington, D.C., opening day ceremonies will be on Oct. 2. There will also be a special meeting of rural cooperative leaders on Oct. 2–3.

And the third annual Cooperative Crafts Exhibition will run month-long in the indoor patio of the U.S. Department of Agriculture's Administration Building.

On display will be hundreds of American heritage and contemporary handicrafts. "How-to-do-it" demonstrations by craftsmen will be among the daily exhibition attractions.

Elsewhere throughout the Nation, five other special programs are scheduled. They will feature cooperatives that provide housing and health services, special services for low income

people, credit unions, and cooperatives overseas.

In addition, a number of State and local governments are planning their own Co-op Month activities. Last year 47 States had official observances.

The theme of Co-op Month 1969 is "Cooperatives: Progress Through People."

All kinds of people use all kinds of co-ops to progress:

—Rural people with marketing, farm supply, electric, telephone, farm credit, and irrigation associations.

—Urban people with housing, consumer goods, and health associations.

—And both country and city residents with mutual insurance, buying clubs, and credit unions.

Cooperatives are especially a part of the farmer's life, however. Through cooperatives, the Nation's farmers:

—Move over a fourth of their products to market.

—Obtain about a fifth of their production supplies.

—Get about a fifth of their farm credit and about three-fifths of their credit for their cooperative businesses.

—Carry half of all their fire insurance and much of their other kinds of insurance.

—Secure water for a fourth of all irrigated land in the United States.

—Use artificial breeding to upgrade half a million of their dairy herds.

—Obtain many on-farm services such as spraying, harvesting, spreading fertilizer, and soil testing.

Farmers' cooperatives are big business.

In 1967-68, a total of 7,940 coops did over \$17 billion worth of business for U.S. farmers.

The Cooperative Farm Credit System sold \$9.5 billion in bonds and debentures to the public to get all its loan funds. It currently has about \$12 billion in loans outstanding. (2)

The Farmer's Sprayer

Dusters have largely given way to sprayers on farms.

Only about 6 percent of the farmers in the United States owned power dusters in 1964 (112,000 units in all). But over 50 percent had power sprayers (about 1 million units).

More than 80 percent of the power spraying units were operated by power takeoff. About 15 percent were powered by auxiliary engines, and 4 percent were self-propelled.

In addition to power dusters and sprayers, the majority of the farmers also had hand-operated or other nonpower pesticide application equipment—totaling about 2.2 million units.

Most all U.S. farmers use some form of pesticides, judging by an ERS survey of 10,800 farmers in 417 counties. And three-fourths of the farmers surveyed applied pesticides with their own equipment. The other fourth relied on custom operators. (3)



Some Wisconsin farmers find they can bag extra income by running a shooting preserve. Ring-necked pheasants attract the most hunters but are the owner's main expense.

From a pheasant's point of view, living in Wisconsin can be downright unhealthy and no guarantee for a long life.

But for operators of shooting preserves, the outlook is a bit better than for several other rural recreation enterprises.

This is the story presented by a recent study of privately owned shooting preserves by the University of Wisconsin and the Economic Research Service of the Department of Agriculture.

Wisconsin hunters have more than 5 million acres of publicly owned or leased lands available to them during the regular hunting season. But most of these public hunting areas are in the north, while most of the hunters live in population centers in the southeast and southern parts of the State.

This location of demand for bird hunting is why much of the expected 40-percent increase in all hunting by 1980 will probably be nearer the cities. This is why landowners are opening game and animal farms, private hunting areas, and shooting preserves. And it also is why more and more hunters may flush pheasants on private land.

The shooting preserve—focus of the ERS study—is a privately owned land and water area where pen-reared game birds are released for hunting during an extended season.

The owner must have a special license from the Wisconsin Conservation Division. The hunters usually are charged a fee per bird. Sometimes a charge is made by the day or season.

Owners of the 22 shooting preserves in the ERS study had invested from \$5,100 to \$75,000 per enterprise—averaging \$7,037 for the small, \$18,800 for the medium, and \$45,017 for the large preserves.

About 80 percent of the investment represented the value of land and water owned by the operators. Fencing, miscellaneous supplies, and investment in other recreation activities such as horseback riding, target and trap shooting, fishing facilities, or dog kennels accounted for the remaining 20 percent.

The majority of the preserve

owners had farm backgrounds. Twenty of the 22 said that the land in their preserve had previously been farmland; many continued some farming.

In fact, about half of the average operator's 1965 gross income came from farming and other sources. Between 80 and 85 percent of their shooting preserve business occurs in October, November, and December.

The preserves ranged in size from 187 acres to 374 acres, although 300 is considered the minimum acreage for a successful enterprise in order to rotate shooting fields and maintain natural conditions.

Gross recreation income came to about \$7,056 per enterprise. The small enterprises averaged \$3,885; the medium \$5,897; and the large \$13,500.

The average net recreation income of the 22 preserves sampled was \$2,814 in 1965. The averages were \$1,928 for small enterprises, \$2,035 for medium sizes, and \$5,068 for the large ones.

The net return to family labor and management—after deducting 6 percent for the use of capital and a charge for depreciation of buildings and equipment—was \$1,515 for the small enterprises, \$1,000 for the medium, and \$2,468 for the large operations.

Pheasants proved to be the star moneymakers of the shooting preserve. They accounted for over 85 percent of the net recreational income. The remaining 15 percent was for fees charged for freezing and cleaning game, and for the hunting of other types of bird and game.

The cost of supplies and equipment—feed for the stocked birds, maintenance of the ground cover crops on the shooting fields—is a major expense for the preserve owner. But the pheasants themselves are his main expense, accounting for over one-half of total preserve costs.

A preserve owner pays about \$1.50 for each pheasant. Then he must provide his charge with clean, safe quarters and plenty to eat for about 12 weeks.

By that time the bird is ready to wing his way out into the limited world of the shooting preserve and gamble against odds of winding up on the table or in a freezer. If he loses, the hunter who bags him is charged a fee of about \$5.25 a bird.

In 1965 the "pheasant kill" by size of the preserve was about 592 birds for small enterprises, 960 for medium, and 2,330 for large preserves. Under Wisconsin law, only 75 percent of the birds set out in a preserve may be shot. The other 25 percent are presumed to escape and join "wild" birds in the surrounding area.

Many of the operators organize their hunters into a club or association. They then charge annual dues of \$130 or so for hunting rights, and allow a pheasant kill of 20 to 25 birds per member.

Whatever the name of the game, running a shooting preserve is a relatively lucrative rural recreational enterprise. (8)

Scanty Education Often Key To Spanish Surnames' Low Earnings

In South Texas, farm families with Spanish surnames just don't earn as much as their counterparts with non-Spanish surnames.

One big reason: education, or rather the lack of it.

ERS researchers, assisted by the Bureau of the Census, recently sketched a statistical portrait of Spanish-surname farm families in 14 Texas counties where they live in significant numbers.

Data were also summarized for non-Spanish farm families in these counties.

By and large, the Spanish-surname families were larger and

their incomes lower than their non-Spanish neighbors.

Spanish households averaged four or more persons—one more than the non-Spanish. But farm incomes of the Spanish worked out to only \$4,900—a fourth as much as non-Spanish farms—and nonfarm incomes were 40 percent lower.

The Spanish-surname families tended to favor types of farming that required only modest capital investments and made full use of their plentiful family labor supply.

Reflecting this emphasis, farms valued at less than \$10,000 were more often operated by Spanishnamed operators. Among the Spanish enterprises, there were three times as many farms of this lower value than there were among the non-Spanish farm operations. More than half the non-Spanish farms were worth more than \$40,000 versus only one-fourth of the Spanish.

Most farm families—over 80 percent of both groups—reported some outside income in 1964. But for the Spanish-surname families such incomes averaged only \$3,600—or some \$2,000 less than the nonfarm earnings of those with non-Spanish surnames.

The difference was primarily a matter of lower earnings per day than those received by the non-Spanish.

Much of this disparity in earnings appeared due to the educational deficiency of Spanish-surname farm people, which was a serious handicap in the nonfarm labor market.

Only 41 percent of the Spanish over 25 years of age were high school graduates, compared with 77 percent of the non-Spanish. As a group, the Spanish suffer a serious educational disadvantage.

Moreover, the educational differences are consistent—they hold true for the various age groups and farm-size classes. And the importance of the educational disadvantage as a factor in the

lower earnings of the Spanish is confirmed by the relationships found between education and earnings within the Spanish and non-Spanish groups.

Members of non-Spanish surname families on farms with sales of less than \$1,200 were nearly as well-educated—and nearly as well paid for their off-farm work—as those on farms with sales topping \$10,000 a year.

The educational level of the Spanish on the smallest farms, however, was decidedly inferior to that of the Spanish on farms with \$10,000 in sales—and so were their daily earnings. (9)

Missing Middle Generation Adds To Heavy Burden of Rural Poor

The family head is close to 65; his wife, about 60. The rest of the household consists of grandchildren whose average age is under 10.

This family structure is not unusual for many rural families living in poverty.

As young adults have left the countryside in search of better jobs in cities, they've not always taken all their belongings with them. Their children sometimes are left behind—to live with grandparents until their own folks get "settled." But when things don't work out as planned, the grandparents may have the responsibility of the youngsters for years.

Extended families—ones where married children or their offspring live with the head—comprised one out of three of the very poorest rural households recently surveyed in South Carolina. Most were nonwhite and virtually all had at least one parent missing.

When the middle generation is missing, poverty becomes a heavier burden for the youth and the oldsters who shoulder it all by themselves. (10)

Farmland May Soon Vanish From The North Atlantic's Landscape

So what if New Jerseyites live 807 persons per square mile? It doesn't sound so impressive—unless you know that's twice the population density of India at the present time.

However, the Garden Staters of today are far less crowded than their offspring are going to be

The North Atlantic Region, of which New Jersey is a part, is already one of the most densely settled areas in the United States—with an average of 263 persons per square mile.

But most children born in the 1960's will live to see the day when the Region's population is twice its present size—unless something occurs to radically alter population projections for the year 2020.

In any case, between now and then, there are bound to be big shifts in land usage. At present, only about 6 percent of the Region's land area is urbanized. This figure is projected to rise to about 8 percent by 1980. And urban areas may well double in size by 2000.

Directly in the expansion path of the Region's major cities lies much of the North Atlantic's better agricultural land.

There's not too much of this land left—since a lot has already passed from plow to pavement. Decreases in cropland of 20 to 30 percent in parts of the Region were not unusual between 1954 and 1964.

ERS economists do not expect such rapid shrinkage in the years ahead. But if present rates do persist, it will be only a few years before the countryside will be out of commuting range of urban residents, who will have to take their children to zoos to see the cows and pigs that once lived in rural America.

Statistics on agricultural land

per capita in the North Atlantic Region already resemble those in some oriental areas.

The three most populous subregions in the study area vary from .21 to .32 acre of crop and pastureland per person. These areas include Boston, New York, and Philadelphia.

By 1980, as the agricultural land base shrinks further, this range drops to .10 to .20 acre per person in these areas.

From the standpoint of food production, these declines are not alarming because the West and Midwest are able to expand production substantially with known technology.

But agriculture contributes more than food to North Atlantic residents. It's part of the Region's aesthetic beauty. And it's food and a habitat for wildlife and game animals.

Preferential tax treatments and rural zoning can help save some of the Region's agricultural land for future generations. Also land subject to frequent flooding should be mapped and considered for uses other than urban development.

But unless the North Atlantic Region acts now to preserve some openland and game refuges and outdoor recreation areas, it may well run out of open space by 2020. (11)

Hired Labor Is an Input Many Small Farmers Can III Afford

If a farmer says he can't really afford a hired hand, he's probably right.

A study of the situation in Wisconsin shows that only about 30 percent of the gross sales on local dairy farms ends up as returns to labor, management, and capital. (The study was based on data from 1964 Census of Agriculture.)

So, an owner of a farm with \$20,000 in sales earns only about

\$6,000 to pay out for labor and retain as his own earnings. And earnings of this amount are hardly enough to support anyone other than his own family.

In fact, only farms which gross \$40,000 or more are considered really adequate to support the operator plus a hired worker.

Not every farmer with a hired worker is earning that much. How does it balance out?

A hired worker may receive a relatively low cash salary in relation to other employed persons But he probably receives more in the way of perquisites-including housing.

And a farmer or members of his family may be able to hold off-farm jobs and boost their incomes because there's an extra hand at home.

The farm family may have to accept lower cash returns for their own labor in order to keep a hired worker. But chances are the opportunity to pursue other interests more than compensates for the monetary sacrifice. (12)

High Birth Rates Swell Oncoming Labor Force in Poor Rural Areas

It's true that with fewer farm job opportunities, young people have been migrating from rural America.

But the conclusion often drawn from this statement—that rural areas are now peopled predominantly by old folks—isn't always true.

Under-23 is actually the average age in some rural areas well-known for their high rates of outmigration in recent years. These areas include the heart of the southern coal fields, much of the tobacco and cotton coastal plain of the Carolinas, and most of the Black Belt and the Mississippi Delta—in short, the worst poverty areas of the South.

Although these areas lost 40 percent or more of their young

people who became 20 years old during the 1950's, they lost a relatively high proportion of their middle-aged residents, too. Thus, by the decade's end, there weren't especially large numbers of old people left. And the young women who didn't migrate to the cities contributed to keeping the age level low, by producing an average of four or more children

What does a youthful popula-

Small Town, U.S.A.

Are small towns becoming ghost towns?

No. In fact, many of them are growing faster than the Nation as a whole, in terms of population.

Nearly three-fourths of the communities nonmetropolitan with 2,500 to 25,000 people in 1950 had racked up population gains by 1960. Their overall rate of population growth (including the minority that lost residents) was 21 percent, which was higher than the Nation's rate.

Towns with even as few as 2,500 to 5,000 people grew by 18 percent on the average, equal to the national rate.

Only in towns with less than 500 residents were population losses more common than population gains. Roughly three-fifths of those places saw their numbers dwindle during 1950-60. Even so, they registered a small aggregate growth, because the gainers gained more people than the losers lost. (14)

tion in these areas imply?

Most importantly, a continuation of outmigration of young adults in the years ahead, unless there's a dramatic growth in job opportunities to provide for the oncoming labor force.

More and better education and training are also needed—so these youth will be equipped with the skills to take their place in tomorrow's world—wherever that place might be. (13)

It Used To Be a Young World Down on the Farm, But No More

In the "old days" most of our citizenry was farm based, but in 1958 only one of every 19 Americans lived on a farm.

The 1968 farm population numbered roughly 10.5 million persons—or about 5.2 million fewer than in 1960.

The average annual decline during the period was about 5.0 percent.

Traditionally the farm population has had a high proportion of children under 14.

But the continued outmigration of young adults and the lowered birth rates of recent years have brought the proportion of young children down from 33 percent in 1960 to about a fourth of the farm total in 1968. This is similar to their representation in the nonfarm civilian populace.

Paralleling the decrease in the young group was an increase in the proportion of older adults. Men and women who had passed their fifty-fifth birthday counted for 23 percent of all farm people in 1968, compared with 18 percent at the start of the decade.

Of the 10.5 million farm residents in the United States last year, 1.1 million —or 10.6 percent —were nonwhite.

Since the beginning of the decade, the nonwhite members of the farm population have fallen off in number more rapidly than the whites—57 percent, compared with 29 percent, respectively. But the nonwhite farm population is still a very young group. Last year, 37 percent of all farm nonwhites were under 14 years of age.

The one unchanging aspect of the U.S. farm population is that it's still predominantly male. In 1968 there were 108 farm males for every 100 farm females. By contrast, the sex ratio for the nonfarm population was 96 males per 100 females. (15)



Hawaii's pineapple industry is not only hurting from cost-price squeeze, but is also suffering from a rash of competition from "new" exporters in world trade.

No matter how they're sliced, Hawaii's pineapple profits are getting thinner and the industry has a chunk of problems.

For many years, the United States (represented by Hawaii) was one of the world's leading exporters of pineapple.

We're now the world's biggest

importer of pineapple.

For every case of canned pineapple exported from our 50th State last year, we imported nearly four cases. Hawaii's sales of pineapple to foreign markets fell to a 13-year low. And Americans on the Mainland were eating pineapple imported from 23 countries-about double the number as recently as 1960.

(True, pineapple and sugar together add over \$300 million a year to Hawaii's coffers. Sugar earned \$192 million in 1967, and pineapple \$133 million. Military spending, at \$517 million, and tourism, at \$400 million, were the top two biggest income producers.)

But there's no denying that King Pine has been losing its economic strength recently.

It's been gradually sapped by rising costs of production and processing, labor shortages, and an onslaught of stiffening competition from "newcomers" in the foreign pineapple production

About 20,000 people are on the payroll of Hawaii's pineapple industry.

Around 90 percent of the crop is processed. Cannery employment peaks at about 14,000 in July, then drops to about 2,500 in early winter after the summer's harvest is over and fall plantings have been made for fruit that will take about 2 years to mature. Plantation workers number about

11 September 1969

6,000 in summer and 2,300 in winter.

The yearly payroll for these workers has averaged well over \$40 million since Hawaii became a State in August 1959.

And pay scales continue to rise. Wage agreements in the industry in 1968 made provisions for wage increases over a 4-year period.

The burdensome cost of labor is aggravated by lack of available labor as well. And Hawaii's pineapple companies say their labor shortage this year has been the most critical in history.

The cannery on Molokai is an example. (Pineapple is grown commercially on all but "big island" Hawaii. Acreage is largest on Oahu, followed by Molokai, Lanai, Maui, and Kaui.)

Until about 2 years ago, Molokai could count on about 100 seasonal workers to supplement its regular work force during canning season. Last year only 35 were available, and this year the company reports only eight could be hired. Hotels and construction jobs are soaking up the seasonals, according to trade sources.

Despite this doleful labor situation, the Aloha State continues to maintain its place as the world's

Pine in the Sky

One way to get a crop to market quickly is by "taking to the air." And air shipments of field fresh pineapple to the U.S. Mainland have been going up—as indicated by the following figures supplied by the Pineapple Growers Association of Hawaii (whole fruit weight, less packaging):

Month	1968	1969			
	1,000 pounds				
Jan Feb. March April May	13,600 6,400 26,000 254,000 57,500	64,900 63,900 367,400 350,400 140,300(17)			

top producer. And there's certainly no slackening in demand for pineapple—on the U.S. Mainland or elsewhere.

Worldwide, demand has strengthened substantially in the past decade, along with sharp production increases in export-oriented countries and the growing popularity of canned fruits in general.

Here at home we're eating just as much or more pineapple per person than we did 10 years ago.

Year in, year out, we eat about half a pound per person of fresh pineapple. And in 1968 the U.S. per capita serving of canned pineapply jumped from a fairly stable level of 3.1 pounds to 3.7 pounds—our biggest helping in over 25 years.

We also use a sizable volume of single strength and concentrated juice—an average of about 3.4 pounds per person during the past decade.

But here's the rub:

Hawaii has lost its dominant position in the world marketplace for pineapple.

Exports of canned pineapple—the major form traded—totaled 18 million cases (basis 24/2½'s) from all major producing countries in 1967. While this was slightly below the alltime high recorded a year earlier, it was more than double the average shipments in 1954–58.

And exports by two Asian countries, Taiwan and Malaysia (including Singapore), accounted for about half of this trade growth. After their pineapple industries suffered almost total destruction in World War II, they rebounded with such vigor that they have now become the world's top two exporters of canned pineapple and are outranked only by the United States in canned output.

Other countries, too, are now competing with Hawaiian pine-apple. South Africa, Australia, Thailand, the Ivory Coast, and Okinawa are among them. And,

of course, Mexico and the Philippines are traditionally producers of commercial significance.

In general, they all have the advantage of a large, relatively cheap farm and cannery labor force and are able to maintain a very competitive price structure in export markets that now extend to our own U.S. supermarkets.

And last year, about 35 percent of our total U.S. civilian dish of canned pineapple was imported—compared with 22 percent 5 years earlier, (16)

A Cutback in Cotton Consumption Hits Workers in Many Industries

When \$100 million worth of cotton is replaced by manmade fibers, it's not just cotton producers who lose out.

Ginners and crop dusters and agribusiness firms and the food industry feel the cut. too.

ERS economists recently developed a statistical technique to measure the effects of fiber substitution in the domestic textile industry.

They substituted manmade fibers for cotton on a dollar-for-dollar basis. They found that a \$100-million rise in manmade fiber use meant roughly 2,500 new jobs for people in the chemical industry. But a \$100-million cutback in cotton use wiped out more than 11,000 jobs in the cotton industry.

Agricultural service industries—the ginners and crop dusters serving cotton producers—also suffered a loss of more than 2,000 jobs. And agricultural products industries had a similar loss because of lower sales to cotton producers and their suppliers.

The food and kindred products industry also lost more than 700 employees—reflecting the reduced output of cottonseed and consequent decline in the production of cottonseed oil. (18)

Palm Oil Picks Up Usage Fast In U.S. Shortening Manufacture

The 160 to 170 million pounds of imported palm oil that U.S. manufacturers are expected to use this year is but a drop in our big fats and oils bucket.

But it's a worrisome drop for domestic soybean and cottonseed oil producers because most people in the trade expect the dollop of palm oil to become larger in the years ahead.

Compared with 1968, this year's projected use already shows remarkable gains. It'll be up about 70 percent from 1968's 97 million pounds. And it's spectacular when compared with the 30 million pounds of 1965.

The shortening industry is the big taker of palm oil, accounting for about four-fifths of total U.S. consumption. Last year some 72 million pounds went into shortening manufacture. And use this year is running about twice as high.

The soap industry—once a supersize market that imported hundreds of millions of pounds of palm oil annually—now takes only a small share of total U.S. imports. Palm oil does not have the quick-lathering properties of coconut and palm kernel oils, which make them useful in the toilet soaps that are still in demand.

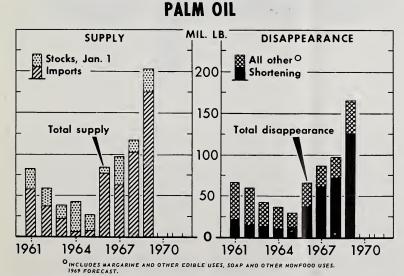
Palm oil's prices, compared with those for domestic fats and oils, are one of its big market attractions.

Palm oil enters the United States duty-free, mostly from Indonesia and Malaysia, and the imported price is currently well below the prices commanded by most edible fats and oils produced domestically.

The value of U.S. imports of palm oil dropped from 11 cents per pound in 1965 to 7.2 cents in 1968. In 1969 this value has averaged 5.8 cents per pound.

U.S. imports and consumption of palm oil are likely to continue their upsurge in the years ahead. This outlook is based not only on the relatively low price level for palm oil, but also on prospective world export availabilities—which are expected to nearly triple by 1975. (19)

ids of triple



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 6951-69 (6) ECONOMIC RESEARCH SERVICE

Some Shippers Shun Least-Cost Method as Not the Best Bargain

Suppose you want to ship a ton of frozen vegetables to Kalamazoo, Mich. How much will it cost?

That depends on whether you ship by truck or by rail.

Normally, a shipper will pick the least-cost method. But the lowest quoted price doesn't necessarily prove to be the best bargain.

Road transport from train station to warehouse can make least-cost rail more expensive in the long run.

And excessive jostling over bumpy roads could cause waste that would up the cost of leastcost truck transport over the original estimate.

Thus, in actual practice many shippers do not ship their commodities by the least-cost method.

In an attempt to determine the factors accounting for the method of transporting frozen vegetables under many different situations, USDA marketing economists recently programed a number of variables into a computer.

The fed-in facts were drawn from a sample of 1,529 frozen vegetable shipments. And the fed-out facts indicated:

—All shipments over distances greater than 879 air miles should have moved by rail for least ultimate cost to shipper; and

—All shipments under 879 air miles should have gone by truck.

If rail shipments moved at rates for the over 60,000-pound minimum load weight and all truck shipments moved at rates applicable to the over-33,000-pound minimum weight, then:

—All shipments less than 1,096 air miles should have moved by truck; and

—All shipments over 1,096 air miles should have moved by rail.

A second sample showed that these rules may only apply to vegetables. (20)



Impact of Common Agricultural Policy of European Community shows up in volume and flow of trading both inside and outside member nations of the "Big 6."

The capstone of the European Community's structure for Agricultural trade has been its Common Agricultural Policy (CAP).

The CAP's hallmark is an in-

tricate system of minimum import prices and variable levies that has virtually insulated much of the EC's agriculture from the direct effects of world trade conditions for many products.

This protectionism has had significant consequences not only on production and consumption incentives within the Community but, in turn, on the level and flow of trade to and from the world outside the Community.

The European Community is the largest foreign market for U.S. farm products. Agricultural exports to the Community have exceeded a billion dollars annually since 1959 and reached a peak of nearly \$1.6 billion in 1966.

Since the adoption of the first provisions of the CAP in 1962, there has been considerable apprehension on the part of the United States and other trading partners regarding the impact of this policy on world trade in agricultural products.

Some of the changes the policy has created in EC agriculture itself are:

—Higher prices for farm produce in most member nations under a price support system designed to secure "adequate income" for farmers. And no provisions for production controls—except for a rather generous production quota for sugar.

—Protection for Community farmers against competition by a variable levy system which increases the prices of imported commodities above those of commodities produced domestically.

—Removal of nearly all trade barriers between member nations, making all markets equally accessible to Community farmers.

—Establishment of an EC-financed export subsidy system providing for subsidies at whatever levels are required to sell products in world markets.

The high prices for farm products in the Community tend to encourage higher production and slow growth in consumption levels.

The adoption of improved cultural practices, which may have been stimulated by the higher prices, has meant higher yields—especially for wheat and coarse grains. These high yields more than compensate for a modest reduction in the amount of land under cultivation.

Freeing internal trade and applying variable levies to imports relegates the United States and other exporting nations outside the Community to the role of residual suppliers since they cannot compete with EC-produced commodities on a price basis.

As a net effect of these changes, non-Community exporters are competing to supply a European market in which recent price movements have raised production levels and reduced the

need for imported goods.

Moreover, as these exporters encounter difficulties in exporting to the EC, they are competing more keenly against the United States in other importing areas, such as Japan and the United Kingdom.

At the same time export subsidies granted by the Community give members the advantage of competing more strongly in third country markets regardless of production costs.

And the decision to export seems to be justified primarily on the basis of Community surpluses with little regard for the supply and price situation in world markets.

For several commodities—such as poultry, barley, lard, canned ham, canned tomatoes and tomato paste, and numerous dairy products—the aggressive export programs of the Community have displaced or threatened to displace products from the United States and other traditional suppliers.

Other developments in the EC—indirectly connected with the CAP—have affected U.S. exports as well.

Rising per capita income has stimulated the demand for meats and other high resource-using foods. This trend has encouraged livestock production and sparked a demand for the livestock feeds which make up a substantial proportion of U.S. agricultural exports. The United States has shared in this growing market mainly by increased sales of soybeans, oilmeals and oilcakes, and feed grains.

Future levels of U.S. feed grain exports to the EC will depend on whether the area maintains or raises its high grain yields of 1967 and 1968 or they drop back nearer to longer term trends.

And though many factors appear favorable to further expansion in the oilseed market, recent proposals for a tax on con-

Box Score for EC Trade

The European Community's total trade, worldwide, reached \$126 billion in 1968. This was 13 percent above the 1967 level. Rising nonagricultural trade caused a slip of about 1 percent in the agricultural trade share.

EC exports (both agricultural and nonagricultural) were valued at \$64 billion last year, and imports at \$62 billion—leaving a \$2.4 billion favorable balance. West Germany continued to have the largest share of the EC's global trade total.

Agricultural trade came to about \$20.1 billion (16 percent of total EC trade).

Farm exports, at \$7.1 billion, rose a sharp 12 percent—due mainly to more output of such exportable products as wheat, dairy products, and animal fats.

Imports of farm products, at \$13.1 billion, went up a more moderate 3 percent but still set a near record and accounted for 65 percent of all agricultural trade.

The United States was the EC's largest nonmember, or "third country," supplier of agricultural products in 1968.

At a value of over \$1.5 billion, our share of the Community's total agricultural imports was 12 percent—about the same as in 1967. The Latin American Free Trade Association (LAFTA) accounted for the second largest share—about \$1.4 billion worth.

We supplied nearly one-third of the Community's \$1.7 billion imports of grains and grain products.

Nearly three-fourths of these shipments were feed grains, high-lighted by a substantial rise from 1967 in the U.S. share of corn. Smaller receipts of grain sorghums, however, were about offsetting. Wheat made up most of the balance.

(In general, however, the EC is providing more of its own feed grain requirements and importing less from outside countries.)

The United States was also the main EC source for oilseeds, supplying 44 percent of total takings of \$768 million.

And while U.S. tobacco continued to dominate EC tobacco imports, the 1968 export volume to the area was down nearly a fourth from 1967. (21)

Frostbite in Brazil

The downtrend in Brazil's exportable coffee supplies will probably be more sharp as the result of a July freeze that hit the State of Parana—which grows about half of Brazil's coffee.

Most of the current 1969/70 crop had been picked when the frost came, and the harvest is expected to be significantly larger than last season's small one.

However, effects of the freeze will undoubtedly show up next season, as a number of trees were severely damaged and some killed.

As a result, it now appears that Parana's 1970/71 crop may be 35 to 50 percent less than its normal harvest of about 750,000 tons. In this event, the June 1971 carryover may be below export and domestic needs for the first time in over a decade. (23)

sumption of vegetable oils, oil-cake, and meal in the Community may reduce demand.

Meanwhile, the CAP has created some problems for the Community itself.

One of the key elements in the operation of the CAP is the European Agricultural Guidance and Guarantee Fund (called by its French initials, FEOGA). The fund was set up to provide for common financing of programs supporting the agriculture of the Community.

As the common financial burden of the CAP grows policy-makers are finding it difficult to assure an adequate income to the many small independent producers with a system that relies primarily on guaranteeing high prices—as is the case at present.

Further strains are placed on the system because the distribution of expenditures among countries differs from the pattern of contribution.

Major importers of agricultural products make substantial contributions to FEOGA, while disbursements tend to support countries producing the largest quantities of agricultural products. West Germany and Belgium, for example, put in much more than they receive from the fund—though the opposite is true for France and the Netherlands.

So there are increasing internal pressures against higher prices. And there is increasing emphasis on discussions of alternative methods to raise farmers' incomes—such as accelerating reforms in production and marketing.

Another concern has been the growing amount of funds needed to keep pace with higher total costs for increased subsidized production.

From 1962/63 to 1968/69, joint expenditures of EC nations through FEOGA rose from less than \$38 million to \$2,433 million.

Over the past few years, for example, it has cost the Community close to \$1 billion to purchase and store surplus butter. Stocks as of April 1 of this year had reached 300,000 tons and are expected to hit over 500,000 tons by the same date in 1970. Current storage capacity will probably be filled by September 1969.

Situations like this have led the member nations to limit Community liability on dairy products and olive oil, so far, and may be a force in bringing about more far-reaching changes in CAP programs. (22)

Inflow of Various Foreign Fruits Surpasses Rise in U.S. Outflow

Fresh apples from Canada and Australia. Brined olives from Spain. Frozen strawberries from Mexico. Preserved cherries from France. Canned pineapple from Taiwan and the Philippines. Dried dates from Iran and Iraq.

Fruits in all forms have shown fairly steady volume and value growth in the U.S. exchange of farm products.

Our purchases of foreign fruits have risen 112 percent—from \$90 million to \$191 million—in the past 8 fiscal years.

These are "supplementary" imports, which compete to some degree with our own production. They may augment domestic output, provide supplies year-round of seasonal items, or satisfy heavier demand for gourmet foods now within reach of rising incomes.

(Excluded from the fruit import trend are about \$187 million worth of fairly stable "complementary" imports—mainly bananas and a few other products we don't grow commercially.)

About one-fourth of our supplementary fruit imports are in fresh form. Apples, strawberries, grapes, oranges, and melons are longtime leaders in volume and trade growth. Cherries, dates, and figs top dried fruit imports. Canned pineapple and oranges are major processed fruits. Blueberries rank next to strawberries in our locker of imported frozen foods.

U.S. fruit exports have also gained—to a lesser extent: \$291 million in 1968–69, against \$282 million 8 years ago. Fresh fruits—especially citrus—predominate. Fruit cocktail leads our canned fruit exports. Peaches are next.

Here are some comparative fruit trade figures, by type:

1961/62	1968/69
1,000	dollars
•	
3,818	11,732
8,483	14,873
24,020	39,873
	15,289
12,503	26,864
60.837	83,283
	18,632
,	47,230
,	43,567
1,945	1,684
	(24)
	3,818 8,483 24,020 6,611

Spurred by Threat of Synthetics, Kenya Woos Pyrethrum Buyers

World trade in pyrethrum—a botanical insecticide—continues to rise despite stiff competition from synthetics.

Kenya alone provides nearly half of the world's supplies of natural pyrethrum (fresh flowers, powder, and extract). And pyrethrum has now displaced sisal as Kenya's third most important export—next to coffee and tea.

U.S. imports of pyrethrum have nearly doubled in the past decade, rising to an average value of over \$7.2 million for the past 3 years from about \$3.8 million in 1958. And Kenya trade sources think that U.S. purchases may be up 10 to 15 percent in the current 1968/69 marketing season.

Pyrethrum accounts for about half the value of our total pesticide imports. About 98 percent of these takings of pyrethrum are now in concentrated extract form (over 700,000 pounds in 1968).

Though the U.S. share of Kenya's total pyrethrum export sales slipped to 28 percent last season from 39 percent in 1966/67, we continued to be Kenya's best customer. Other sizable markets last season were the United Kingdom (15 percent) and Italy (11 percent). Both of these countries also favor the extract form of the pesticidal import.

Leading markets for dried pyrethrum flowers are Japan, Argentina, and India. Chief customers for powder are Thailand, Malaysia, and Hong Kong.

Kenya's pyrethrum industry is controlled by a national Pyrethrum Board established in 1936 to encourage introduction of a crop that would swell cash receipts of the individual African farmer.

Once established, the crop has registered steady advances in export earnings. The recent slowdown in rate of sales growth is attributed to the relatively high cost of pyrethrum products and the development of cheaper synthetic substitutes.

To ward off the synthetic threat, Kenya reduced its pyrethrum prices by 15 percent last October.

Kenya is also encouraging production of higher yielding varieties by giving bonuses to growers of flowers with high pyrethrin content and penalizing growers of low-content flowers. (25)

Southeast Asia Relies on Trade Pacts To Stabilize Rice Situation

Rice trade, furthered by country-to-country agreements, is the source of both problems and prospects for stabilizing trade in Southeast Asia.

And the rice situation in recent years has been anything but steady.

Rice exports have fallen sharply—from over 4 million tons in 1964 to less than 2 million in 1968.

Imports have fluctuated between 1.8 and 3.0 million tons. And during the last 2 years more rice was imported into the region than was exported. U.S. exports into the area increased from 186,000 tons in 1964 to 1.2 million tons in 1968.

Export prices, too, reflect the fluctuating rice situation. The Thai export price stayed between U.S. \$125 and \$150 per ton between 1956 and 1965. But in 1967 it went up sharply to more than \$250. Good weather and rice production have alleviated the tight rice supply and the price has recently fallen to \$175.

Bilateral arrangements have been the most important stabilizing factor in international rice trade in the past. And it is likely that this will continue to be true.

Historically most of Burma's exportable surplus has been committed by bilateral arrangements with India and other countries. A

recent agreement with India calls for the exchange of 200,000 tons of rice for textiles and other manufactured products.

Ceylon has a rubber-for-rice agreement with Mainland China that has provided about 200,000 tons of rice in exchange for 75,000 tons of rubber in recent years.

Pakistan had a trade agreement with Mainland China, too; rice was traded for jute and cotton.

Singapore receives from 60,000 to 100,000 tons of rice annually from Mainland China, and partially pays for it in rubber, teak, and other products.

Burma has a tripartite cotton agreement with the United States and Pakistan. U.S. cotton is sent to Pakistan, spun into yarn, and shipped to Burma. Burma sent rice to East Pakistan through 1968. Burma also ships rice to the USSR in exchange for fertilizer and machinery.

Indonesia and the United Arab Republic have an agreement to exchange rice for tea and spices. The UAR sent 60,000 tons of rice to Indonesia in 1968.

Probably the most significant of the bilateral arrangements have been the agreements between the United States and several Southeast Asian countries for shipments of rice, wheat, and coarse grains under Public Law 480 programs (Food for Peace), initiated in 1954.

By the end of 1968, about \$750 million worth of grains had been shipped from the United States to Burma, Indonesia, the Philippines, Taiwan, and Vietnam under P.L. 480.

Policy decisions by the United States and the Southeast Asian countries will determine the future impact of U.S. food aid.

Present P.L. 480 legislation calls for a shift from local currency sales to dollar credit sales by the end of 1971, and some countries appear reluctant to participate under these terms. (26)



Householders who're bugged by insect invasions face a choice of 10,000 concoctions to kill pests. Among the "safer" ingredients is pyrethrum—extract of daisies.

Fleas on the family dog? Weevils in your flour bin? Ants in the pantry? Silverfish in the bathroom? Or maybe it's caterpillars on your dahlias or anonymous bugs on your thriving tomato plants.

The list of pesty problems confronting the average householder sometimes appears to be neverending.

Small wonder, then, that many consumers are so absorbed in buying and applying one or more of hundreds of pesticide products that they sometimes don't bother to find out whether they're using the best weapon for the specific emergency.

Federal law requires that all

pesticide products be registered with the U.S. Department of Agriculture before they can be marketed in interstate commerce. To obtain registration, the manufacturer must prove that his product (1) will be effective against the pest or pests listed on the label and (2) will not injure humans, crops, livestock, and wildlife when used as directed.

Research of recent years is suggesting that good weapons

against most household or garden pests have the following characteristics:

—They're low in toxicity to man and animals.

—They don't taint or damage growing food crops.

—Insects don't build up a resistance to them. And they also have such an agitative effect that they drive such pests as cockroaches out of their hiding places so that they may be attacked more easily.

—They're also nonpersistent, leaving no lingering toxic residue.

There are such products on retail shelves today. One of them that has survived many tests of time is provided by nature:

It's pyrethrum—made from a daisy-like member of the chrysan-themum family, whose flowers exude four biochemical ingredients (pyrethrins I and II and cinerins I and II).

And now, with increased emphasis on the potential environmental hazards of some pesticides, there are some indications that pyrethrum may be used in place of—but more often in combination with—its more toxic competitors.

At present, natural pyrethrum—all imported—contributes only a small drop to our large container of insecticides. However, much of our imported pyrethrum goes into products for "residential" consumers.

(Only about 5 percent of imported pyrethrum winds up as an agricultural input, mostly for use on livestock or crops to be canned or frozen.)

Prospects for increased use of pyrethrum in household insecticides are indicated by three major developments:

—An uptrend in U.S. imports of natural pyrethrum extract from Kenya, the world's major producer.

—Introduction of synthetic pyrethrums (one in consumerpackaged form is now on U.S. retail shelves, and two others have been "registered"—which means they are authorized to start production).

Reduction of natural pyrethrum prices and higher pyrethrin content of flowers through selective breeding.

If and when enough synthetic pyrethrum is produced and marketed cheaply enough, it might supplant the natural product to a large extent. And most U.S. consumers may not be aware of the substitution.

Some plants are endowed with

Daisies Don't Tell . . . But

Seed catalogs and gardeners' guides divulge that the pyrethrum daisy (source of a natural insecticide) grows most everywhere on every continent.

Botanists call it chrysanthemum cinerariefolium. Amateur flower growers in Anywhere, USA, often know it as "painted daisy," and it's been a garden favorite since colonial days in Williamsburg and New England.

The insect killer and repellent ingredients of the pyrethrum plant are for the greatest part concentrated in the flowers—especially in the developing seeds.

So why can't garden clubs in Topeka or Skaneateles start making their own pyrethrum insecticide?

The main reason (among many others) is the fact that pyrethrum is fussy about its environment. It demands certain salubrious conditions to produce its biologically active chemicals—pyrethrins and cynerins—in effective quantity or quality.

Pyrethrum is at its best in highlands near the equator. There, during days that are warm and nights that are cool—at an altitude between 6,500 and 9,000 feet—it will flower in profusion from 8 to 10 months.

This allows for a fairly continuous harvest of flower heads, instead of the single burst of bloom available for plucking in most temperate zone areas. And to get 1 pound of the insecticidal compound takes at least 80 pounds of dried flowers, for nearly 80 percent of the content of the pyrethrum flower is moisture (28).

insect-repellent qualities. But pyrethrum is one of the few that is toxic to insects, and has been commercially exploited. Rotenone (from derris root) and nicotine are among others that are toxic to insects.

Like many agricultural products, pyrethrum has had its commercial ups and downs. The Chinese reputedly used it to kill pests 2,000 years ago and the Persians used it as the secret base of a popular insect powder in the early 1800's.

After World War II, insecticides derived from plants were largely supplanted by synthetics or organic chemicals such as DDT. Many of these, however, had a high level of toxic residue.

So, the pyrethrum industry not only survived but actually received three boosts.

For one thing, scattered commercial production was transplanted to Kenya when a soldiersettler introduced Dalmatianbred seed whose vigor was such that plants literally ran wild over the favorable terrain.

Then came the invention of the aerosol pressurized dispenser. This innovation provided an economic and handy means of dispensing pyrethrum.

The third boon to the industry was the U.S. discovery of a number of synergists, or chemical "boosters." When added to pyrethrum they increased its activity and also reduced the cost of using pyrethrum.

U.S. consumers, of course, don't associate themselves with any faraway long ago or present developments in the pesticide industry when they're dusting their roses or spraying their cupboards.

But if they are using a bug killer containing pyrethrins, they are quite likely contributing a bit to the economic wellbeing of 175,000 Africans who pluck their livelihood from the daisies of the pyrethrum industry. (See page 17 for trade in pyrethrum.) (27)

Scope of U.S. Pesticide Laws Widened During Past 60 Years

Paris Green—an arsenic compound—was pitted against the Colorado Potato Beetle in 1867.

This beetle battle is said to mark the first U.S. use of commercial pesticides in a continuing war against pests and insects.

In the 100 years following, a spate of laws appeared on Federal, State, and local books as pesticide use became widespread—particularly after the advent of DDT in the 1940's.

The Insecticide Act of 1910 was the first in a series of Federal laws to control use of pesticides through registration requirements, advice to users, and residue monitoring. The purpose of the 1910 act was to prevent the manufacture, sale, or transportation of adulterated or misbranded insecticides and fungicides.

The Federal Insecticide, Fungicide, and Rodenticide Act of 1947 then replaced earlier legislation. It requires registration of pesticides before they are sold or introduced into interstate or foreign commerce.

This act of 1947 is still the major Federal regulatory law today.

It has been amended twice:

—In 1959, to cover nematocides, defoliants, desiccants, and plant regulators—as well as insecticides, fungicides, rodenticides, and herbicides:

—In 1964, to put the burden of proving the safety of a pesticide on the applicant for registration rather than on the Secretary of Agriculture.

Other Federal laws are the Federal Hazardous Substance Act which requires "poison" labels and antidote information; and the Federal Food, Drug, and Cosmetic Act of 1938, which, as amended in 1954, establishes a specific method for controlling pesticide residues on raw agricultural commodities.

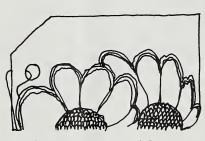
In addition to these laws the Federal Committee on Pest Control coordinates the monitoring of pesticide residue levels as conducted by the Departments of Agriculture, Interior, and Health, Education, and Welfare.

States have not ignored the pesticide problem either.

Forty-seven States have laws regulating the sale and distribution of agricultural and household pesticides. Thirty-five have statutes regulating pesticide use. Twenty-one of these require all commercial applicators, ground and aerial, to have licenses.

Noncommercial as well as commercial users are covered in four States—California, Massachusetts, New Hampshire, and Washington.

New Hampshire, for example,



requires noncommercial users who apply pesticides to crops, land, water, or forests to have an annual permit, and to demonstrate that they understand how to use pesticides.

California appears to have the most comprehensive pesticide laws. Regulations may be applied to both commercial and noncommercial use of pesticides—and even extended to residues in food.

Most State laws regulating pesticide application require applicants to show proof of financial responsibility, to keep records of use, and to register and allow inspection of equipment.

The problem is being faced at the local level, too, in some areas. Special purpose districts—units of local government—have been created for the control of pesticides as well as pests. (29)

Most U.S. Adults Succumb To Flower Power During the Year

Who is saying what to whom with flowers?

A recent study of the commercial floriculture trade reveals that over 60 percent of adult Americans "say it" each year with about 391 million purchases worth about \$1,947 million. During any 2-month period, however, only 34 percent generally make purchases.

Florists make about one-half of the sales and take in about 63 percent of the money. Garden centers account for most of the balance.

Floral arrangements are the biggest sellers in terms of dollars. They represented 37 percent of the value and 21 percent of the number of purchases.

Whatever the floral product—blooming or not—"for the garden" is the reason given for buying 22 percent of the number of purchases in a year, and for generating 17 percent of the value in a year.

In terms of dollars, however, purchases for funerals and memorial occasions are ahead, accounting for 29 percent of the value.

For the frequent buyer, decoration of the house or garden is the main occasion for buying. Buying for home or garden was particularly prominent by those who had attended college.

Those most likely to succumb to the power of the flower have been found to be college educated females, between 40 and 49 years old, with incomes of over \$10,000. But the most frequent corsage buyer continues to be a male.

If buyers are classified as frequent, infrequent, and nonbuyers, it was found that infrequent buyers generally pick up flowers for special occasions such as Easter and birthdays. Nonbuyers may consider buying on such occasions, but don't. (30) ADJUSTMENT OPPORTUNITIES ON FARMS RAISING BURLEY TO-BACCO IN SOUTHWEST VIRGINIA. W. D. Givan, Farm Production Economics Division, and R. G. Kline, Virginia Polytechnic Institute. Va. Agr. Expt. Sta. Research Div. Bull. 34.

An analysis was made to determine the combination of enterprises that would maximize income to the fixed resources land and operator labor. Three sizes of representative farms were studied in the analysis.

PROCESSING, STORAGE, AND SELECTED STORAGE SERVICE COSTS FOR FLUE-CURED TOBACCO IN COMMERCIAL FACILITIES, 1966, 1967 AND ESTIMATED 1968. N. A. Wynn, Jr., D. A. Reimund, and J. W. H. Brown, Marketing Economics Division. ERS—411.

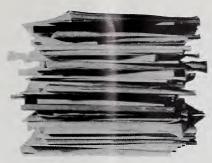
This report analyzes the costs of handling processing storage and related services in commercial facilities handling flue-cured tobacco during 1966/67 and makes estimates for 1968.

CHANGES IN AGRICULTURAL PRODUCTION AND TECHNOLOGY IN COLOMBIA. L. J. Atkinson, Foreign Development and Trade Division. FAER-52.

The report begins with a general overview of Colombia's agricultural situation. Then the principal crops are classified into five groups based chiefly on the state of technology used in their production. Each of these groups is discussed with emphasis on production and technological changes. (See June 1969 Farm Index.)

RURAL HOUSING IN THE NORTH-EAST COASTAL PLAIN AREA OF SOUTH CAROLINA. R. L. Hurst, Economic Development Division. AER-163.

Half of the rural housing units located in 10 counties in the Northeast Coastal Plain of South Carolina were substandard in 1966. This situation was slightly



RECENT PUBLICATIONS

The publications listed here are issued by the Economic Research Service and cooperatively by the State universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D.C. 20250. State publications (descriptions below include name of experiment station or university after title) may be obtained only by writing to the issuing agencies of the respective States.

better than in 1960 when 57 percent of the occupied homes were substandard and considerably better than in 1950 when 84 percent were substandard. What substandard homes typically lack in rural areas is adequate plumbing and this deficiency implies a chronic threat to community health.

INDICES OF AGRICULTURAL PRODUCTION IN EASTERN EUROPE AND THE USSR, 1950-68. Europe and Soviet Union Branch, Foreign Regional Analysis Division. ERS-For. 273.

This is the first time that detailed indices for this part of the world have been published by the USDA, although indices of aggregate output have been published for several years.

AIRPHOTO USE IN RESOURCE MANAGEMENT: A SURVEY OF

NON-FEDERAL PURCHASERS OF AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE AIRPHOTOS. O. E. Krause, Natural Resource Economics Division. AIB-336.

Aerial photographs acquired and used by the Department of Agriculture to administer farm programs are widely used by ther government agencies and the public for various purposes. Use of airphotos has increased greatly in recent years, yet little is known about the nature and extent of utilization. (See March 1969 Farm Index.)

PRODUCTIVITY OF DIVERTED CROPLAND. P. Weisgerber, Farm Production Economics Division. ERS-398.

Estimates of the average productivity per acre of cropland diverted from production under U.S. government programs—nearly 63 million acres in 1966—have varied widely. Those concerned with future food and fiber requirements and the Nation's capacity to meet these necessities need a dependable estimate. This study undertakes to meet that need.

ESTIMATED COSTS, RETURNS, AND INPUT REQUIREMENTS FOR SELECTED CROP AND LIVESTOCK ENTERPRISES IN THE BURLEY TOBACCO AREA OF SOUTHWEST VIRGINIA. W. D. Givan, Farm Production Economics Division, in cooperation with Virginia Polytechnic Institute. Va. Agr. Expt. Sta. Bull. 27.

This report presents information on costs, returns, and input requirements for selected crop and livestock enterprises in the burley tobacco area of southwest Virginia.

A SOCIO-ECONOMIC PROFILE OF THE 1965 FARM WAGE FORCE. A. Rapton, Economic Development Division. AER-157.

The 3.1 million persons comprising the hired farm work force

in 1965 had a median family income of \$2,900, less than half the average family income of all persons in the United States. The poorest farm wage workers were nonwhite, aged 55 and over, with only a grade school education.

CROP DRYING IN THE UNITED STATES, 1966: QUANTITY, EQUIPMENT, FUEL USED. P. E. Strickler, H. V. Smith, Farm Production Economics Division, and W. C. Hinson, Jr., Statistical Reporting Service. SB-439.

The purpose of this study was to determine the extent that drying of crops and other practices have increased consumption of liquid petroleum fuels on the farm; the extent of crop drying for specific crops by States and regions; the extent that crop drying is being performed with farmer-owned and custom-hired equipment; the quantities and kinds of fuel used to dry crops with farmer-owned equipment; and national trends in drying of corn.

THE STORY OF U.S. AGRICUL-TURAL ESTIMATES. Statistical Reporting Service. Misc. Pub. 1088.

Requirements for agricultural information have changed as the frontier pushed further inland, as manufacturing began to move from the farm to shops and factories, and as the need for a more

effective marketing system evolved. This is the story of the changes that have taken place in U.S. agriculture.

HOMEMAKERS' OPINIONS ABOUT SELECTED MEATS: A NATION-WIDE SURVEY. M. Weidenhamer and E. M. Knott, Statistical Reporting Service, and L. R. Sherman, National Analysts, Inc. MRR-854.

This study of homemakers' opinions about selected meats was undertaken to provide guidelines for programs of research, education, and information on meats and to provide product characteristics that satisfy consumer demand better. The findings presented in this report are based on personal interviews conducted with 3.099 homemakers during 1967. These homemakers represented a cross-section of private households located in both urban and rural areas throughout the 48 conterminous States. (See July 1969 Farm Index.)

PESTICIDE APPLICATION EQUIP-MENT OWNED BY FARMERS, 48 STATES. R. Jenkins and others. AER-161.

Pesticides are essential to modern agriculture for the effective control of pests and diseases that attack crops and livestock. This report discusses the amount, type, cost, and regional distribution of the ownership of pesticide application equipment used by farm operators in 1964. Emphasis is on power-driven sprayers and dusters, and on machine attachments. (See p. 4, this issue.)

THE IMPACT OF NEW GRAIN VARIETIES IN ASIA. J. W. Willett, Foreign Regional Analysis Division. ERS-For. 275.

In the last 2 years, the rapid spread of highly productive new varieties of rice and wheat in several less developed countries of Asia has increased the likelihood that these countries will improve the diets of their rapidly growing populations. These new varieties of grain, along with better weather, more fertilizer, higher prices to farmers, and other factors, have helped to bring about dramatic increases in grain production in India, Pakistan, and the Philippines.

ECONOMIC IMPLICATIONS OF TECHNOLOGY ON OPTIMUM FARMING SYSTEM, INCOME, AND COTTON PRODUCTION ON COTTON FARMS IN THE SOUTHWESTERN COASTAL PLAIN AREA OF GEORGIA. N. R. Martin and W. C. McArthur, Farm Production Economics Division, in cooperation with Georgia Agricultural Experiment Station. Ga. Agr. Expt. Sta. Res. Bull. 57.

This report presents results from a major cotton producing area in Georgia.

Numbers in parentheses at end of stories refer to sources listed below:

1. P. Leo Strickland (SM); 2. Beryle Stanton (SM); 3. Robert Jenkins and others, Pesticiced Application Equipment Owned by Farmers, 48 States, AER-161 (P); 4. Gordon E. Rodewald, Jr., Resource Entrapment in Agriculture (S): 5. Farm Income Situation, FIS-214 (P); 6. Wayne D. Rasmussen (SM); 7. Joseph P. Biniek, Livestock Production Versus Environmental Quality—An Impasse? (S): 8. Rudolph A. Christiansen and others. The Shooting Preserve in Wisconsin: An Economic Survey, Wis. Agr. Expt. Sta. (M*); 9. Edward J. Smith, Spanish-Surname Farm Operators in Southern Texas, AER-162 (P); 10. Jackson V. McElveen, Characteristics of Human Resources in the Rural Northeast Coastal Plain: With Emphasis on the Poor, AER-155 (P); 1. Robert G. Martin (SM); 12. William D. Saupe and N. D. Kimball (SM); 13. and 14. Calvin Beale (SM); 15. Human Resources Branch, Farm Population—Estimates for 1968 (M); 16. Charles Brader (SM); 17. Garnette Weller (SM); 18. Philip F. Rice and Preston E. LaFerney, An Input-Output Analysis of the U.S. Textile Industry (M); 19. George W. Kromer, "U.S. Consumption of Imported Palm Oil Increasing," Fats and Olis Sit., FOS-248 (P); 20.

Walter Miklius (SM); 21. Joseph R. Corley, "Agricultural Trade of the European Community: Calendar Year 1968," For. Agr. Trade, Sept. '69 (P); 22. Byron L. Berntson, O. Halbert Goolsby, and Carmen O. Nohre, The European Community's Common Agricultural Policy (M): 23. Howard Hall (SM); 24. Foreign Agricultural Trade, Sept. '69 (P); 25. Africa and Middle East Branch, Foreign Regional Analysis Division (SM); 26. Quentin M. West (SM); 27. and 28. Austin Fox, "Chemical Pesticides," Structure of Six Farm Input Industries, ERS-357 and Rex Dull and John Fales (SM); 29. William D. Anderson (SM); 30. Richard Hall and Stephen M. Raleigh, Commercial Floriculture and Related Products: An Analysis of Purchases and Buyers of Goods and Services, Marketing Year Ended May 1967, MRR-855 (P); 31. Jackson V. McElveen, Characteristics of Human Resources in the Rural Northeast Coastal Plain: With Emphasis on the Poor, AER-155 (P).

Speech (S); published report (P); unpublished manuscript (M); special material (SM); *State publications may be obtained only by writing to the experiment station or university cited.

ECONOMIC TRENDS

	UNIT OR BASE PERIOD	'57-'59 AVERAGE	1968		1969		
ITEM			YEAR	JULY	MAY	JUNE	JULY
Prices: Prices received by farmers Crops Livestock and products Prices paid, interest, taxes and wage rates Family living items Production items Parity ratio Wholesale prices, all commodities	1910-14=100 1910-14=100 1910-14=100 1910-14=100 1910-14=100	242 223 258 293 286 262 83	261 229 288 354 335 292 74	261 223 294 355 337 293 74	282 237 321 374 351 306 75	284 231 329 375 351 308 76	282 224 332 374 352 305 75
Industrial commodities Farm products Processed foods and feeds Consumer price index, all items Food	1957-59=100 1957-59=100 1957-59=100 1957-59=100 1957-59=100 1957-59=100	= = = = = = = = = = = = = = = = = = = =	108.7 109.0 102.2 114.1 121.2 119.3	109.1 108.8 103.9 115.9 121.5 120.0	112.8 112.2 110.5 119.4 126.8 123.7	76 113.2 112.2 111.2 121.4 127.6 125.5	113.3 112.4 110.4 121.9
Farm Food Market Basket: 1 Retail cost Farm value Farm-retail spread Farmers' share of retail cost	Dollars Dollars Dollars Percent	98 3 388 595 39	1,118 435 683 39	1,124 450 674 40	1,157 472 685 41	1,176 495 681 42	
Farm Income: ² Volume of farm marketings Cash receipts from farm marketings Crops Livestock and products Realized gross income ³ Farm production expenses ³ Realized net income ³	1957-59=100 Million dollars Million dollars Million dollars Billion dollars Billion dollars Billion dollars	32,247 13,766 18,481 —	126 44,386 18,847 25,539 51.1 36.3 14.8	123 3,547 1,417 2,130 —	98 3,307 892 2,415 —	108 3,525 1,177 2,348 55.1 38.8 16,3	127 3,900 1,500 2,400 —
Agricultural Trade: Agricultural exports Agricultural imports	Million dollars Million dollars	4,105 3,977	\$ 6,228 \$ 5,028	466 339	584 438	512 430	_
Land Values: Average value per acre Total value of farm real estate	1957-59=100 Billion dollars	=	_	°160 °182.0	⁷ 179 ⁷ 202.6	=	_
Gross National Product: 3 Consumption 3 Investment 3 Government expenditures 3 Net exports 3	Billion dollars Billion dollars Billion dollars Billion dollars Billion dollars	457.3 294.2 68.0 92.4 2.7	865.7 536.6 126.3 200.3 2.5	_ _ _ _		924.8 572.8 137.4 212.9 1.6	=
Income and Spending: 4 Personal income, annual rate Total retail sales, monthly rate Retail sales of food group, monthly rate	Billion dollars Million dollars Million dollars	365.3 17,098 4,160	687.9 28,309 6,106	691.0 28,674 6,148	740.0 29,386 6,312	746.1 29,339 6,255	752.3 29,481 —
Employment and Wages: 4 Total civilian employment Agricultural Rate of unemployment Workweek in manufacturing Hourly earnings in manufacturing, unadjusted	Millions Millions Percent Hours Dollars	63.9 5.7 5.8 39.8 2.12	75.9 3.8 3.6 40.7 3.01	76.0 3.8 3.7 40.9 3.00	77.3 3.8 3.5 40.7 3.16	77.7 3.7 3.4 40.7 3.17	77.9 3.6 3.6 40.7 3.18
Industrial Production:4	1957-59=100	_	165	166	173	174	175
Manufacturers' Shipments and Inventories: Total shipments, monthly rate Total inventories, book value end of month Total new orders, monthly rate	Million dollars Million dollars Million dollars	28,745 51,549 28,365	50,310 88,579 50,597	51,425 85,829 50,181	53,741 92,139 54,133	54,673 92,142 53,630	=

¹ Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1959-61—estimated monthly. ² Annual and quarterly data are on 50-State basis. ³ Annual rates seasonally adjusted first quarter. ⁴ Seasonally adjusted. ⁵ Preliminary. ⁶ As of November 1, 1968. ⁷ As of March 1, 1969.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

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OFFICIAL BUSINESS

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Working Wives

Supper's seldom ready. The housework gets only a once-overlightly. And buttons off shirts get lost before they're sewed on.

Life with a working wife is no picnic. Nevertheless, the income that working wives bring home often makes a big difference in living standards.

For families near the edge of poverty, the wife's earnings at least assure there is a supper—even if it's late.

A recent study of rural families in the northeast coastal plain of South Carolina showed that only one of every eight families where both the husband and wife worked lived in serious economic deprivation. When there was but a single breadwinner in the family, one in four families was seriously deprived.

ERS researchers asked the spouses who were not in the labor force whether they would accept a job if one was available for which they qualified.

More than half the spouses in the lowest income groups said yes. By race, three-fifths of the non-whites and about a fourth of the whites wanted employment.

Joblessness among heads of households in South Carolina is relatively low—about 3.6 percent of the labor force. But if the spouses who desired work were added to the rolls of the unemployed, the potential unemployment rate would rise to 46 percent.

Many wives in South Carolina don't even enter the labor force, even though they'd like to work, because there aren't enough jobs for which they qualify. (31)

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